

US Serial No.
10/506,857

PATENT
2641-1-001PCTUS

CLAIMS AMENDMENTS

Please cancel Claims 1-11, 20, and 21, without prejudice.

Please amend the claims as follows

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (currently amended) A method for apoptosis of tumor cells; or cancer cells ~~or cells undergoing aberrant growth~~ in a mammal, comprising administering to said mammal an effective amount of ~~the~~ an apoptogenic-bacteriocin of Claim 1 capable of inducing apoptosis in eukaryotic tumor cells or cancer cells, wherein the apoptogenic-bacteriocin is not toxic to normal eukaryotic cells, is a pore-forming or channel forming bacterial protein of molecular weight less than 10,000, and is microcin E492 or an active fragment or an analog thereof, said analog having mutations or alterations in the microcin E492 amino acid sequence, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic tumor cells or cancer cells.

13. (currently amended) A method for apoptosis of tumor cells; or cancer cells ~~or cells undergoing aberrant growth~~, comprising administering to said mammal an effective amount of ~~the~~ an apoptogenic-bacteriocin capable of inducing apoptosis in eukaryotic tumor cells or cancer cells of Claim 1 in combination with an anti-tumor or anti-cancer agent or compound, wherein the apoptogenic-bacteriocin is not toxic to normal eukaryotic cells, is a pore-forming or channel forming bacterial protein of molecular weight less than 10,000, and is microcin E492 or an active fragment or an analog thereof, said analog having mutations or alterations in the microcin E492 amino acid sequence, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic tumor cells or cancer cells.

14. (currently amended) A method for apoptosis of tumor cells; or cancer cells ~~or cells undergoing aberrant growth~~ in a mammal, comprising administering to said mammal an effective amount of apoptogenic-bacteriocin comprising the amino acid sequence of SEQ ID NO: 1, 2, ~~3 or 4~~, or an active ~~fragment portion~~ fragment or an analog thereof, said analog having mutations or alterations in SEQ ID NO: 2, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic tumor cells or cancer cells.

15. (currently amended) A method for reducing or blocking eukaryotic cell growth in a mammal comprising administering to said mammal ~~of~~ an effective amount of the an apoptogenic-bacteriocin ~~of Claim 1~~ capable of inducing apoptosis in eukaryotic cells, wherein the apoptogenic-bacteriocin is not toxic to normal eukaryotic cells, is a pore-forming or channel

forming bacterial protein of molecular weight less than 10,000, and is microcin E492 or an active fragment or an analog thereof, said analog having mutations or alterations in the microcin E492 amino acid sequence, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic cells.

16. (currently amended) A method for reducing or blocking eukaryotic cell growth in a mammal comprising administering to said mammal an effective amount of apoptogenic-bacteriocin comprising the amino acid sequence of SEQ ID NO: 1, 2, ~~3 or 4~~, or an active ~~fragment portion~~ fragment portion or analog thereof, said analog having mutations or alterations in SEQ ID NO: 2, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic cells.

17. (currently amended) A method for the treatment ~~or prevention~~ of cancer in a mammal by administration to said mammal of an effective amount of ~~an the~~ an apoptogenic-bacteriocin ~~of Claim 1~~ capable of inducing apoptosis in eukaryotic tumor cells or cancer cells, wherein the apoptogenic-bacteriocin is not toxic to normal eukaryotic cells, is a pore-forming or channel forming bacterial protein of molecular weight less than 10,000, and is microcin E492 or an active fragment or an analog thereof, said analog having mutations or alterations in the microcin E492 amino acid sequence, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic tumor cells or cancer cells.

18. (currently amended) A method for the treatment ~~or prevention~~ of cancer in a mammal by administration to said mammal of an effective amount of the apoptogenic-bacteriocin capable of inducing apoptosis in eukaryotic tumor cells or cancer cells ~~of Claim 1~~ in combination with an anti-tumor or anti-cancer agent or compound, wherein the apoptogenic-bacteriocin is not toxic to normal eukaryotic cells, is a pore-forming or channel forming bacterial protein of molecular weight less than 10,000, and is microcin E492 or an active fragment or an analog thereof, said analog having mutations or alterations in the microcin E492 amino acid sequence, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic tumor cells or cancer cells.

19. (currently amended) A method for the treatment ~~or prevention~~ of cancer in a mammal by administration to said mammal of an effective amount of apoptogenic-bacteriocin comprising the amino acid sequence of SEQ ID NO: 1, 2, ~~3 or 4~~, or an active fragment ~~portion~~ or analog thereof, said analog having mutations or alterations in SEQ ID NO: 2, wherein said fragment or analog is capable of inducing apoptosis in eukaryotic cells.

20. (Canceled)

21. (Canceled)